## REMARKS

The present application was filed on September 21, 2005 as a national phase filing under 35 U.S.C. §371 based on International Application No. PCT/FI2003/000575. The national phase filing was accompanied by a Preliminary Amendment wherein claims 1-35 from the international application were canceled without prejudice and new claims 36-72 were presented. Claims 36-72 are thus pending in the present application.

In the outstanding Office Action dated November 25, 2008 (which appears to attempt to correct defects in the previous Office Action dated May 1, 2008), the Examiner required restriction of claims 36-72 of the above-referenced application to one of the following groups of claims: claims 36-55 and 72 (Group I); and claims 56-71 (Group II). The Examiner also required election of a species: claims 36-51 (Species A); claims 52-55 (Species B); and claim 72 (Species C).

Applicants note that the present restriction requirement (like the previous restriction requirement) fails to specify what the proposed classifications for search would be for each group. Thus, Applicants have no way of knowing why the Examiner would suggest that all of claims 36-72 could not be reasonably searched in one search effort. Applicants request that the Examiner specify the proposed classifications for search.

Notwithstanding the above request, Applicants traverse the restriction requirement for at least the following reasons.

While the preamble of independent claim 36 recites a substrate, the claim goes on to recite a plurality of photodetectors, each photodetector of the plurality having an active area on a first surface of the substrate and a further active area on the side of a second surface of the substrate, wherein each photodetector of the plurality is provided with an adjacent conductive via electrically isolated from the substrate, from the first surface of the substrate to the second surface of the substrate, for connecting the active area to the second surface of the substrate, the second surface providing electrical connections for the active areas and the further active areas of the plurality of photodetectors.

Further, while the preamble of independent claim 52 recites an imaging system, the claim goes on to recite at least one substrate including an array of photodetectors, each photodetector of the array having an active area on a first surface of the substrate and a further active area on the side of a second surface of the substrate, wherein each photodetector of the array is provided with an adjacent conductive via electrically isolated from the substrate, from the first surface of the substrate to the second surface of the substrate, for connecting the active area to the second surface of the substrate, the second surface providing electrical connections for the active areas and the further active areas of the array of photodetectors.

Still further, while the preamble of independent claim 56 recites a method, the claim goes on to recite providing for each of the photodetectors of the plurality an active area on a first surface of a substrate; providing for each of the photodetectors a further active area on the side of a second surface of the substrate; forming for each of the photodetectors an adjacent conductive via electrically isolated from the substrate, through the substrate from the first surface of the substrate to the second surface of the substrate; connecting the active areas to the conductive vias such that the active areas are connected to the second surface of the substrate; and providing at the second surface electrical connections for the active areas and the further active areas of the plurality of photodetectors.

Lastly, while the preamble of claim 72 recites a radiation detector, the claim goes on to recite at least one of said at least one substrate including a plurality of photodetectors, each photodetector of the plurality having an active area on a first surface of the substrate and a further active area on the side of a second surface of the substrate, wherein each photodetector of the plurality is provided with an adjacent conductive via electrically isolated from the substrate, from the first surface of the substrate to the second surface of the substrate, for connecting the active area to the second surface of the substrate, the second surface providing electrical connections for the active areas and the further active areas of the plurality of photodetectors.

Thus, it would appear that the various claims would be searchable in similar classifications given the similarity of claim language across each of the independent claims, and would therefore not require an unreasonable search effort.

Nonetheless, Applicants elect with traverse the claims of Group I, i.e., claims 36-55 and 72.

Regarding the species election, first, Applicants respectfully point out that page 3 of the Office Action states: "Applicant is required, in reply to this action, to elect BOTH a single group and if Group II is elected then applicant is required to elect a single species from Species A-C....."

However, page 3 goes on to identify the alleged species as: Species A (claims 36-51); Species B (claims 52-55); and Species C (claim 72). Thus, the claims of Group II, claims 56-71, are not identified in any of the alleged species, and thus any election of a species would necessarily have to come from Group I claims, not Group II claims as requested by the Examiner.

Second, Applicants traverse and respectfully assert that the Office Action mischaracterizes any "special technical feature" that may be attributed to the claimed invention. That is, Applicants do not agree with the characterization that the "special technical feature" of the claimed invention is the "through-substrate via filled with conducting material." Furthermore, inspection of the claim language in the independent claims (repeated above) will support the assertion that claims 36-72 do in fact relate to a general inventive concept.

Third, in relation to Group I claims directed to a structure (i.e., substrate, imaging system, and radiation detector), Applicants respectfully assert that any such alleged species are permissible since there is no prior art which would justify restriction to a specific species.

Also, Applicants respectfully point out that since the present application is a U.S. patent application, it is inappropriate to apply PCT rules during prosecution thereof.

Nonetheless, to the extent the Examiner intended to indicate that an election of species needs to be made from Group I, Applicants elect with traverse the claims of Species A, i.e., claims 36-51.

## Attorney Docket No. 800186US

The Examiner is invited to contact the undersigned attorney to discuss any points raised in this response. Applicants assert that claims 36-72 of the present application are in condition for allowance, and request favorable reconsideration.

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Respectfully submitted,

Attorney for Applicant(s) Reg. No. 39,274

Ryan, Mason & Lewis, LLP

90 Forest Avenue

Locust Valley, NY 11560

(516) 759-2946